

REMARKS

Status of Claims

Applicant submits this paper in response to the office action dated August 25, 2004. In the office action, the examiner entered a restriction requirement as follows:

Group I: claims 55-58, 76-83 and 87;

Group II: claims 62-70;

Group III: claims 88-96;

Group IV: claims 59-61, 71-75, 84-86 and 97-100.

The Office Action defines Group I as a process of using a photo-definable layer in manufacturing a semiconductor device, Group II as a process for forming a self-aligned contact, Group III as a process of using a photo-definable layer in a dual Damascene process, and Group IV as a semiconductor device.

This response amends claim 87 to correct its claim dependence from claim 83 to claim 84. As now pending claim 87 depends from claim 84. As such, for the purposes of this response it will be assumed that the Examiner will assert that claim 87 is within Group IV.

The Applicant respectfully traverses the restriction with regard to the grouping of the claims in Group IV. More particularly, it is respectfully asserted that claims 59-61 and 84-87 should properly be included with Group I; claims 71-75 should properly be within Group II; and claims 97-100 should be within Group IV.

The Restriction Requirement notes that Group IV is related to Groups I, II, and III as Group IV is a product made and the other groups are processes of making. More particularly, with respect to the relationships, the Restriction Requirement states "In the instant case, the semiconductor device in Invention IV can be made by using organic photoresist material and a separate insulative material instead of using the present photodefinable layer that is convertible to an insulative material." [Paragraphs 5, 6 and 7 of the Restriction Requirement]

However, it is respectfully asserted that this contradicts the actual claim language. For example, with regard to independent claim 59 the preamble includes “A semiconductor device formed using a photo-definable layer...” and in the body of the claim further states “at least one feature formed on said substrate by converting selected portions of a photodefinable layer...”; “by using exposed portions of said photodefinable layer as a mask...”; and “by leaving said exposed portions of said photo-definable layer...” Similarly, independent claim 84 has a preamble that includes “a semiconductor device formed using a photo-definable layer” and the main body of the claim includes “formed by converting selected portions of a photodefinable layer...”; by removing non-exposed portions of said photo-definable layer to form a pattern within said photodefinable layer...”; and “by leaving said exposed portions of said photo-definable layer....”

Similarly, limitations regarding the photodefinable layer may be found within the other independent claims of Group IV (claims 71 and 97).

As such, it is respectfully asserted that the statement that the devices claimed in Group IV can be made without using the present photodefinable layer is inaccurate. As such it is respectfully asserted that the claims of Group IV should be included within the other groups. In particular, it is asserted that claims 59-61 and 84-87 should be included in Group I.

Subject to this traversal, Group I is elected for prosecution.

As noted above, it is respectfully asserted that Group I should further include claims 59-61 and 84-87.


As such this paper cancels the claims of Groups II and III and the portion of the claims of Group IV that correspond to Groups II and III. Thus, claims 62-70, 71-75, 88-96, and 97-100 are canceled.

Conclusion

Applicants respectfully assert that the pending claims are in condition for allowance. Reconsideration of the application is respectfully requested.

The Examiner is invited to contact the undersigned at the phone number indicated below with any questions or comments or to otherwise facilitate expeditious and compact prosecution of the application.

Respectfully submitted,



Richard D. Egan
Registration No. 36,788
Attorney for Applicant

O'KEEFE, EGAN & PETERMAN, LLP
1101 Capital of Texas Highway South
Building C, Suite 200
Austin, Texas 78746
(512) 347-1611
FAX: (512) 347-1615